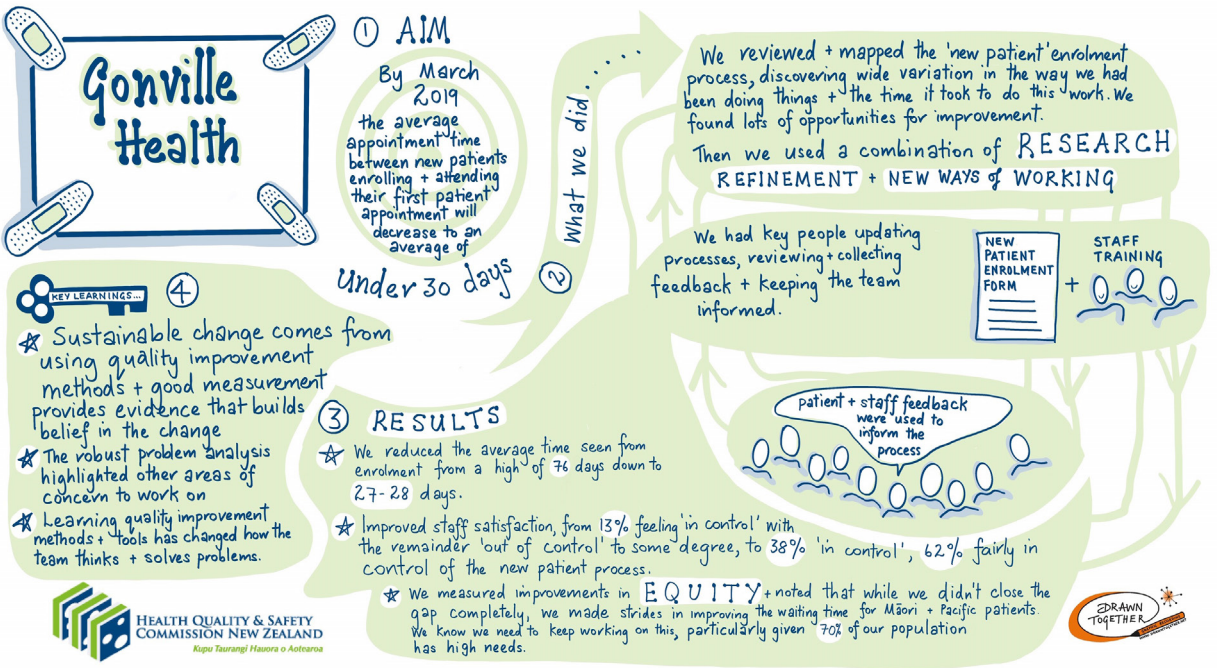
Primary care improvement case study

Gonville Health: Improving the patient enrolment process

Number 7 in a series of 18

Project overview



As a Very Low Cost Access (VLCA) practice, Gonville Health was feeling overwhelmed by the number of new patients that we were enrolling and trying to create a therapeutic relationship with.

This change package shows our journey of how we went about understanding our problem and creating a process of change and evidencing improvement.

The results have been that the staff now feel more in control, and patients are better informed and say enrolling is less complicated. In addition, we know more about our patients in a way that helps us partner with them towards being more engaged in the practice, their health and self-management.

Background and context

Gonville Health is a purpose-built general practice located in a high-deprivation area of Whanganui. The VLCA practice has about 7,200 enrolled patients, of whom 70 percent are high-needs patients.

- Nineteen percent of our patients are registered with community mental health services.
- A total of 5.5 per 1,000 have a report of concern (including a high number of vulnerable children).
- Our enrolled population is transient and growing.

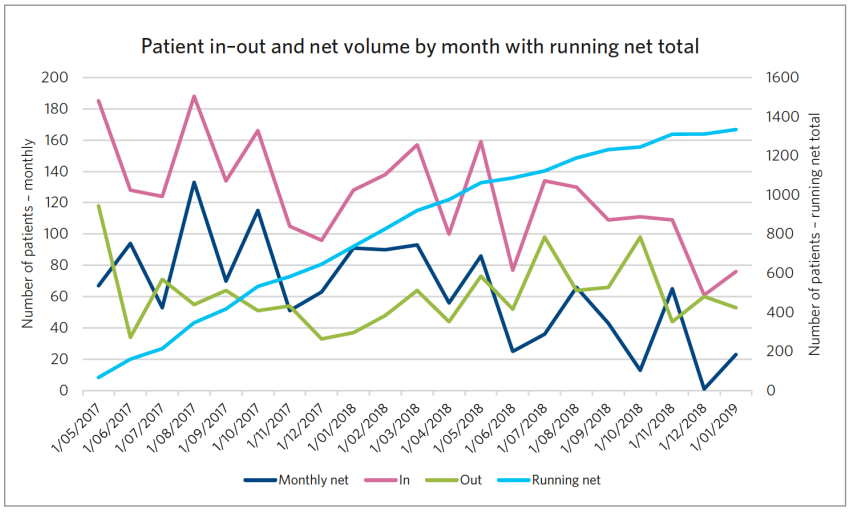
Diagnosing the problem

1 Problem statement:

Having an enrolled population that contains a large proportion of high-needs patients with little engagement in health, combined with inconsistent and resource-intensive processes, is overwhelming the practice.

2 How you know that this is a problem?

Our enrolment data showed a high rate of 'churn' as both new patients enrolled and existing patients left the practice each month but overall the total of enrolled patients was increasing. This was contributing to a high workload and stressful working environment for staff and a poor experience for patients.



New enrolments	
May 2017–January 2019	2,637

Patient exits	
May 2017–January 2019	1,301

3 What is the baseline data? What is the significance of this problem in your specific locality and/or practice?

The purpose of establishing Gonville Health as a VLCA integrated family health centre was to meet the health needs of a community that was identified to have high and complex needs. About 70 percent of the enrolled population are Māori or Pacific peoples and/or live in a low-income area (meeting the criteria for high-needs patients[1]). In addition, one-fifth of the population are diagnosed with mental health and other co-morbidities.

Features of the area that influence the characteristics of the practice population are the location of Kaitoke prison, reasonably cheap housing in Whanganui and the availability of seasonal work. Because of these influences and the nature of the practice population itself, the practice and its patients experience the flow-on effects of high transiency. As an example, over the seven months from April to October 2017 the practice enrolled 1,030 new patients, 350 patients formally exited the practice (439 in total) and the high-needs population increased by a further 4 percent. In an enrolled population of 6,379, this represents a high scale of churn in and out of the practice in seven months.

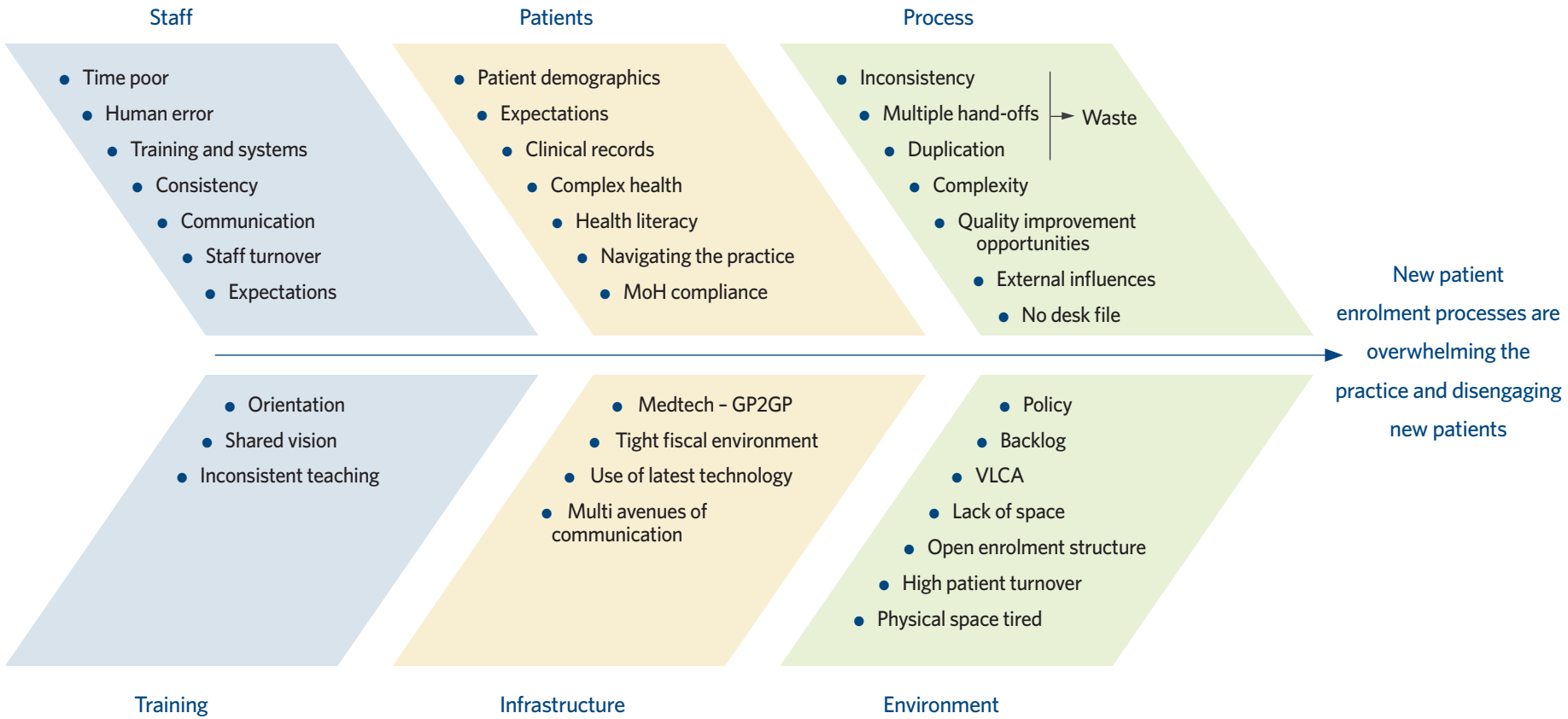
We have found that the patients newly enrolling at Gonville Health typically do not have good clinical notes or clinical work-up before they start at the practice. A high proportion do not have their population health indicators completed or recorded.

The 'new and exit patient process' is costly and time consuming, requiring about 1 to 1.5 full-time equivalent staff to complete. Patients also find the Ministry of Health's enrolment requirements coupled with the practice's new patient appointment process off-putting and confusing. It is common for patients to refuse to complete the enrolment form process and to not attend their first patient appointments.

1 www.health.govt.nz/our-work/primary-health-care/primary-health-care-subsidies-and-services/very-low-cost-access-scheme

Fishbone cause-and-effect diagram

The team brainstormed potential causes of the delay from initial enrolment to attendance at a first appointment using the categories shown in the cause-and-effect diagram below.



Legend:
MoH = Ministry of Health
VLCA = Very Low Cost Access.

Interrelationship diagram

The team had a lot of ideas about the things that were contributing to the problem but couldn't agree on which were the most significant. To help clarify our thinking, we used an interrelationship diagram (shown below) to figure out which factors were the biggest likely causes of our problem, rather than just symptoms of it, and visualise the relationships between them. The factors with the highest number of 'out' arrows were having the biggest impact.

The analysis showed the factor that was having the biggest impact and that we could do something about was the resource-intensive and inconsistent process for new enrolments.

Interrelationship diagram

www.qimacros.com/quality-tools/relation

The aim

By March 2019, the average appointment time between new patients enrolling and attending their first patient appointment will decrease to an average of under 30 days.

The measures

The following is a summary of our family of measures. See Appendix 1 for detailed operational definitions of the measures.

Outcome measure:

- By March 2019, the average appointment time between new patients enrolling and attending their first patient appointment will decrease to an average of under 30 days.

Process measures:

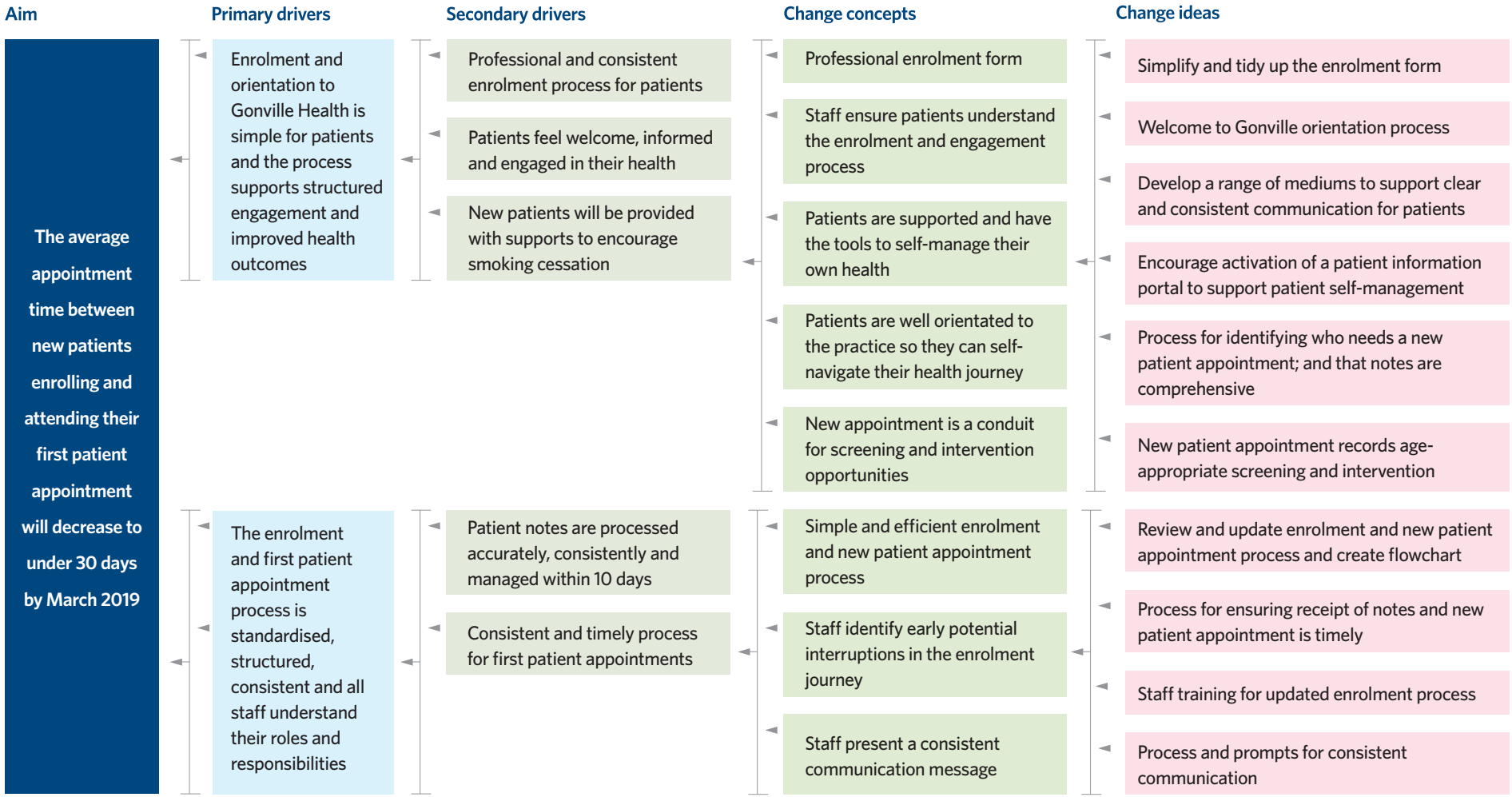
- By December 2019, the average time taken between enrolling a patient and the patient's notes being received will be less than 10 working days.
- By March 2019, 80 percent of new enrolees will adopt the patient portal, Manage My Health (MMH).

Balancing measure:

The indicators of staff feeling in control of the process stay the same or improve over time.

Drivers of change

Driver diagram: Gonville Whakakotahi 2018



What we did

1 Were there any ethical considerations to be aware of?

There were no ethical considerations to be aware of.

2 What aspects of the project were co-designed with consumers? How did you involve consumers in co-design? What processes did you use?

We discussed ideas and documentation with a consumer advice group that was already in place before we started this project.

3 What QI tools did you use, that you would recommend?

Tools that really stood out in guiding our work were the:

- interrelationship diagram, which was the key tool to focus our thinking on the main problems
- driver diagram, which helped us to stay on track and plan our project.

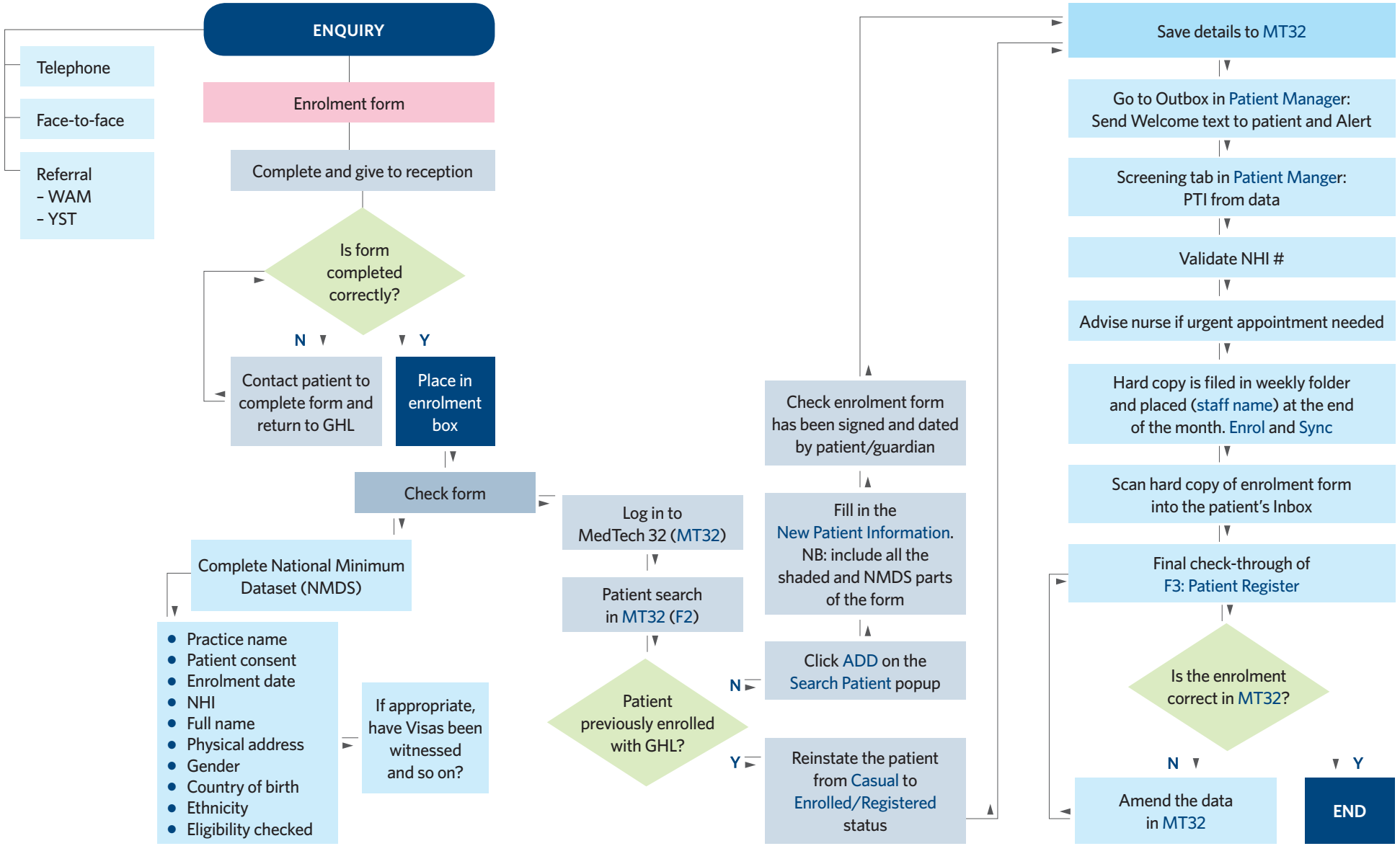
Other tools that were useful at various times in the project were:

- process mapping
- fishbone cause-and-effect diagram
- plan–do–study–act (PDSA) process.

4 What changes did you test that worked?

- Redesigning the new enrolment form
- Streamlining the new patient enrolment process
- Identifying one clinician to review and update patient notes, identify clinical needs and risk, and create a clinical management plan for each new patient
- Reviewing the appointment process for enrolling new patients, using the following process.
  - **Process mapping**. By working with staff involved, we reviewed the current state to see whether the process contained any inconsistencies and duplication. We used a range of mapping processes including sticky notes and physical walk-throughs. See the updated state map below.
  - **Review and trial**. After review and discussion we started trials, which included scenarios, process timing and case studies.
  - **Observations**. Observations found variance in process and time taken, duplication, lack of common vision and communication, as well as a range of errors and some competition between staff members, with an attitude of 'this is how we have always done it'.
  - **Current state**. We have now reduced the chance for human error, had a range of meetings and training to align vision and approach, and developed an evolving flow chart to support consistency. We have identified efficiencies and reduced pressure, with the team more aligned and 'proactive with improvements and ideas'.

Updated state map

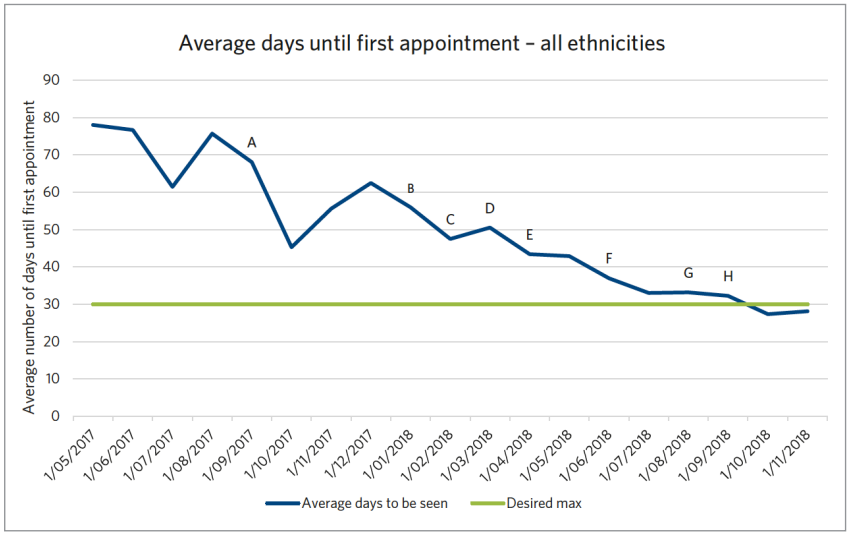


Note: GHL = Gonville Health NHI = National Health Index PTI = Patient transfer in WAM = Whanganui Accident and Medical YST = Youth Services Trust

The results

1 Did the outcome measure improve?

Average number of days between enrolment and first patient appointment over time.



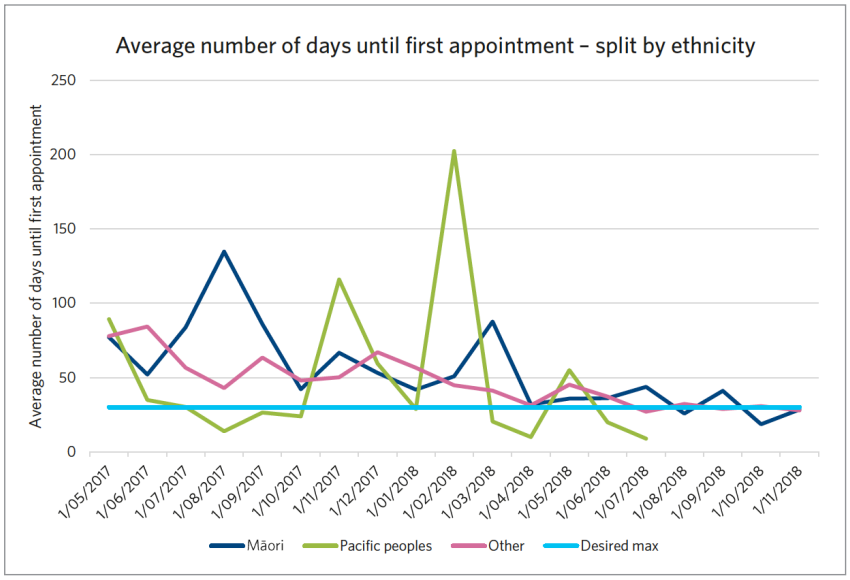
Legend

A	Submitted Whakakotahi EOI
B	Project start
C	Process mapping
D	Remodelled enrolment form
E	Flu season
F	Adopted changes to new patient appt process
G	Adopted receipt of notes measurement reporting
H	Encouraging patient sign up to Manage My Helath

Although our outcome measure had already started to improve just because we were focusing our attention on it, we did not see significant and sustained improvement until we applied scientific improvement methods to our problem.

2 What equity measures improved?

Ensuring that the changes don't create inequities.

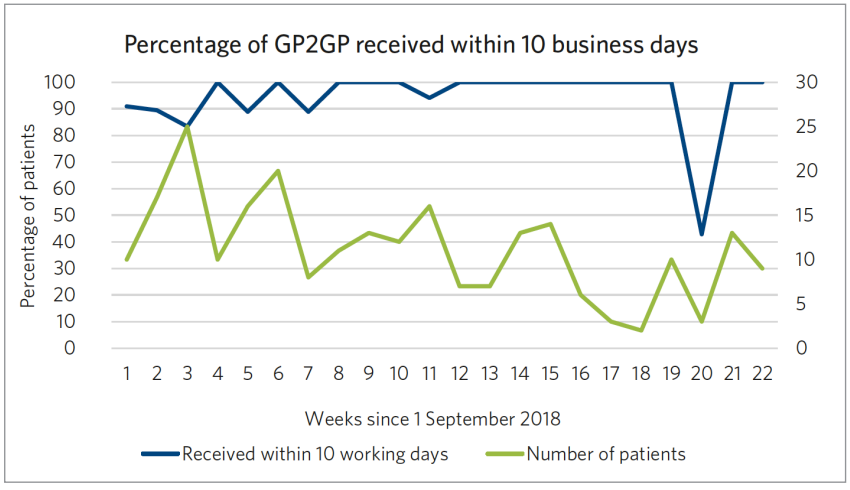


This chart shows the average days delay for first appointment broken down by ethnicity. The dark blue line is the average number of days till their first appointment for Māori patients, the green line is for Pacific patient and the pink line is the rest of the patient population. This demonstrates the large equity gap at the start of the project and how this was narrowed or closed by the end of the project. In the later months there were no new enrolments for Pacific patients.

3 What process and balancing measures improved?

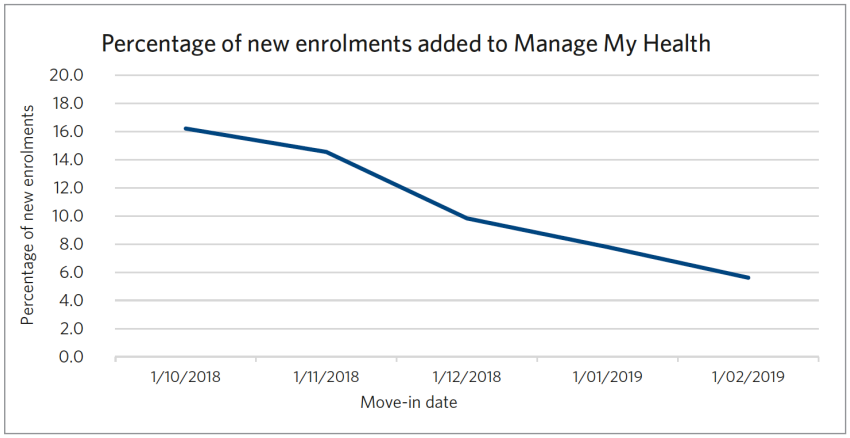
Process measure:

By December 2019, the average time taken between enrolling a patient and the patient's notes being received will be less than 10 working days.



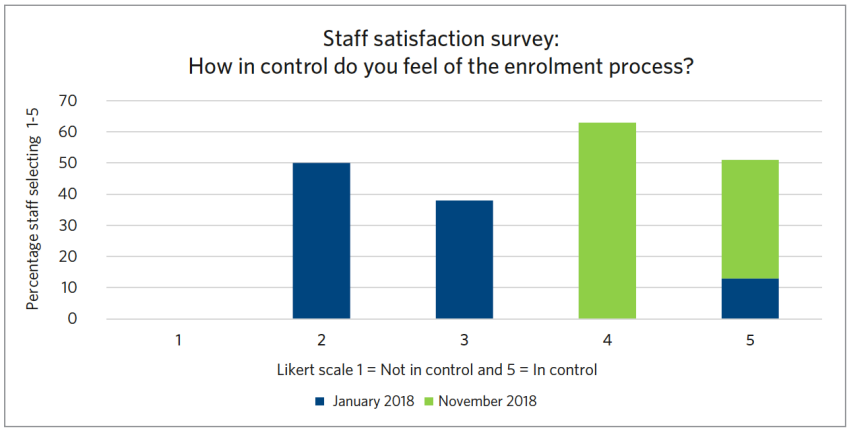
Process measure:

We aimed to have 80 percent of new enrolees adopt the patient portal, Manage My Health (MMH) and were not successful with this.



Balancing measure:

We aimed to have the indicators of staff feeling in control stay the same or improve over time. We saw a big improvement in staff feeling in control of the enrolment process. Initially only 13 percent of staff felt in control of the new enrolment process. At the end 38 percent felt in control and 62 percent felt fairly in control.



4 Were there any unintended consequences such as unexpected benefits, problems or costs associated with this project?

Establishing a cancer register

- A near-miss in cancer surveillance for a new patient led us to create a quality improvement process. It includes register management, clinical review and a surveillance plan for all new patients who have previously been diagnosed with cancer.

e-enrolment

- Gonville Health has recently partnered with Dr Info to trial e-enrolment (ScrEnrol).
- The quality improvement project documentation provided evidence to support our proposal to be trial partners of the e-enrolment product with Dr Info.
- The enrolment process is simple for patients.
- The administration process is simple and quick for staff.
- Enrolment and income are immediate through the National Enrolment Service.

5 Is there evidence that the knowledge of quality improvement science in the team or in the wider organisation improved?

The team gained transferable skills and are on a continual journey!

Post-project implementation and sustainability

Have the successful changes been embedded into day-to-day practice? How have you managed this?

The process that we put in place is now part of business as usual. Staff and patient feedback is positive and we are not experiencing of the previous issues that had previously occurred on a daily basis.

Summary and discussion

Clinical safety

- Clinical risk has reduced (because we know the patient and what is important to them, and their records are correct and up to date).
- Patients are seen in the timeframe that they expect, and nurses and doctors are prepared when they arrive.

Legitimacy

- Services to Improve Access (SIA) funding[2] recognises the importance of access and equity. It is now much easier for us to quantify the numbers of new patients each month and how many meet the SIA criteria because we are keeping a continuous record of it. We are able to show that we are increasing the levels of high-needs patient enrolments in our practice.
- The project has helped with defining who we are and why we exist as an open access practice. We were established specifically to address inequities in access within our local community.
- We have received recognition for our achievements.

Highlights

- Patient engagement and staff satisfaction have increased.
- A greater level of calm has emerged since the quality improvement changes.
- Staff are using the knowledge and skills gained to achieve sustainable improvement.
- Staff are working as a team.
- Staff are also doing side streams of work (for example, the cancer register) due to the knowledge gained.
- We know it will only get better from here.

Lowlights

- It was difficult to find time for the project and deal with competing priorities.
- It was tempting to reach a solution or conclude without going through a quality process.
- It was easy to move off track.

What were the lessons learnt?

- Sustainable change will come from using quality improvement methods.
- Good measurements provide evidence of achievement and encouragement.
- The approach of digging into the data and using measures tells the true story and removes the emotion.
- Quality improvement is ongoing, and you often branch out to other improvement opportunities as you progress (for example, the cancer register).
- Quality improvement done right brings a team together and creates benefits for patients.
- Early patient investment pays dividends. (Patients are more engaged.)

2 www.health.govt.nz/our-work/primary-health-care/primary-health-care-subsidies-and-services/services-improve-access

Summary and discussion – continued

What would you recommend to a team somewhere else that wants to take on a similar project?

Be prepared for the additional work but the gains through personal and practice development will benefit the whole of the practice and you will all look at things differently going forward.

Are there any future steps or ongoing work that you are intending to continue with on this project topic?

This new process has now become business as usual and was sustained during the chaos of COVID-19. Even though we are still seeing high numbers of enrolees each month, the level of calm and control has been maintained.

The team

- Janine Rider – service manager and quality improvement facilitator
- Manu Lewis-Maniapoto – project leader
- Bev Foster – nurse leader
- Colleen Dudley – clinic coordinator
- Lucia Gribble – nurse practitioner intern
- Co-opted members: Gonville Health staff and consumers

Everyone in this team was individually strong but more importantly they were all keen to make a difference and work together as a team for a better outcome.

In a busy practice it is easy for the time to pass in usual work. For this project, however, having the committed time in scheduled meetings and engagement with the Health Quality & Safety Commission and the other Whakakotahi teams built a sense of accountability and desire for progress.

Appendix 1: Operational definitions of measures

Description	Measure	Performance at project planning stage	Target performance
Outcome measure ▼			
• Reduce the time between the patient enrolling in the practice and attending their first appointment to help engage the patient in the practice and their health care journey as soon as possible after enrolment	• By March 2019, the average appointment time between new patients enrolling and attending their first patient appointment will decrease to an average of under 30 days	• As at July 2018 average time is 30 days. This is a decrease from the average of 75 days in May 2017	• Reach 30 average days between the patient enrolling and attending their first patient appointment by March 2019
Process measure ▼			
• Measure and reduce the time taken between enrolling the patient and receiving their notes	• By December 2019, the average time taken between enrolling a patient and the patient's notes being received will be less than 10 working days	• No measurement, no follow-up of notes not received	• By week 8, 100% had been achieved and was consistently achieved after that
• Patient portal will be adopted by new patients as a support mechanism of self-management	• By March 2019, 80% of new enrolees will adopt the patient portal	• 4.4–4.6% enrolled in October and November 2018 and less than 1% before rollout of the change	• 80% of new enrolees by March will also enrol in patient portal at the same time as enrolling at the practice
Balance measure ▼			
• Ensure that the change process does not affect staff satisfaction or empowerment	• The indicators of staff feeling in control of the process stay the same or improve over time	• In January 2018 50% of staff indicated they were a 2 on a scale of 1–5, where 5 was feeling fully in control of the enrolment process	• In November 2018 62% of staff stated they were a 4 and 38% a 5 on the scale of control

Appendix 2: Enrolment form

Form available to download as a MS Word document here.

Gonville Health

44B Abbot Street, Whanganui 4500.
Ph: (06) 344 4090 Fax: 344 4089
EDI: Progresh Internal Mailbox: GH
GP Name: Gonville Health NZMC: F2T096

Enrolment form

* Denotes compulsory fields
Anyone over age of 16 years must complete their own enrolment form

NHI (Office use only)

Name

Title	* Given name/s	* Preferred name	* Family name

Other name/s (such as maiden name)

Birth details

* Day / Month / Year	* Place of birth	* Country of birth

Gender

☐ Male ☐ Female ☐ Gender diverse *please specify*

Occupation

Residential address

* House (or RAPID) number and street name	* Suburb/rural location	* Town/City and postcode

Postal address (if different from above)

House number and street name or PO Box number	Suburb/rural delivery	Town/City and postcode

Contact details

* Mobile phone	* Home phone	* Email address

Next of kin/emergency contact

Name	Relationship	Mobile (or other) phone

Transfer of records

To get the best care possible, I agree to the practice obtaining my records from my previous Doctor.
I also understand that I will be removed from their practice register.

☐ Yes, please request transfer of my records ☐ No transfer ☐ Not applicable

Previous Doctor and/or practice name	Address/location

Ethnicity details – tick the ethnic group/s which apply to you

☐ Māori ☐ Samoan ☐ Cook Island Māori ☐ Tongan ☐ Niuean ☐ New Zealand European
☐ Chinese ☐ Other Pasifika (such as Tokelauan). *Please state*
☐ Indian ☐ Other (such as Dutch, Japanese, Australian). *Please state*

Community Services Card – if applicable

☐ Yes ☐ Expiry Day/Month/Year Card Number

High User Health Card – if applicable

☐ Yes ☐ Expiry Day/Month/Year Card Number

Practice specific field

Appendix 2: Enrolment form – continued

Form available to download as a MS Word document here.

My declaration of entitlement and eligibility		
☐		**I am entitled to enrol** because I am residing permanently in New Zealand. The definition of residing permanently in New Zealand is that you intend to be resident in New Zealand for at least 183 days in the next 12 months
I am eligible to enrol because:		
☐	a	**I am a New Zealand citizen** If yes, tick box and proceed to **I confirm that, if requested, I can provide proof of my eligibility** below
If you are **not** a New Zealand citizen, please tick which eligibility criteria applies to you (b–j) below		
☐	b	I hold a resident visa or a permanent resident visa (or a residence permit if issued before December 2010)
☐	c	I am an Australian citizen or Australian permanent resident **and** able to show I have been in New Zealand or intend to stay in New Zealand for at least two consecutive years
☐	d	I have a work visa/permit and can show I am able to be in New Zealand for at least two years (previous permits included)
☐	e	I am an interim visa holder who was eligible immediately before my interim visa started
☐	f	I am a refugee or protected person **or** in the process of applying for, or appealing refugee or protection status, **or** a victim or suspected victim of people trafficking
☐	g	I am under 18 years and in the care and control of a parent/legal guardian/adopting parent who meets one criterion in clauses a–f above **or** in the control of the Chief Executive of the Ministry of Social Development
☐	h	I am a NZ Aid Programme student studying in New Zealand and receiving Official Development Assistance funding (or their partner or child under 18 years old)
☐	i	I am participating in the Ministry of Education Foreign Language Teaching Assistantship scheme
☐	j	I am a Commonwealth Scholarship holder studying in New Zealand and receiving funding from a New Zealand University under the Commonwealth Scholarship and Fellowship Fund

I confirm that, if requested, I can provide proof of my eligibility			
☐	Evidence sighted	Staff Name (Office use only)	

My agreement to the enrolment process	
NB – parent or caregiver to sign if you are under 16 years	
☐	**I intend to use this practice** as my regular and ongoing provider of general practice/GP/health care services.
☐	**I understand** that by enrolling with this practice I will be included in the enrolled population of this practice's Primary Health Organisation (PHO) Whanganui Regional Health Network, and my name, address and other identification details will be included on the Practice, PHO and National Enrolment Service Registers.
☐	**I understand** that if I visit another health care provider where I am not enrolled I may be charged a higher fee.
☐	**I have been given information** about the benefits and implications of enrolment and the services this practice and PHO provides, along with the PHO's name and contact details.
☐	**I have read and I understand** the Use of Health Information Statement. The information I have provided on the enrolment form will be used to determine eligibility to receive publicly-funded services. Information may be compared with other government agencies, but only when permitted under the Privacy Act.
☐	**I understand** that the practice participates in a national survey about peoples' health care experience and how their overall care is managed. Taking part is voluntary and all responses will be anonymous. I can decline the survey or opt out of the survey by informing the practice. The survey provides important information that is used to improve health services.
☐	**I agree** to inform the practice of any changes in my contact details and entitlement and/or eligibility to be enrolled.

Signatory details			
* Signature	* Day / Month / Year	Self-Signing	Authority
		☐	☐
An authority has the legal right to sign for another person if for some reason they are unable to consent on their own behalf.			

Authority details where signatory is not the enrolling person		
* Full Name	* Relationship	* Contact phone
Basis of authority such as parent of a child under 16 years of age		